K071365

# 510(k) SUMMARY

# Bard Medical Division, C.R. Bard, Inc.'s Agento™ I.C.® Silver-coated Endotracheal Tube

# Submitter's Name, Address, Telephone Number, Contact Person and Date Prepared

Bard Medical Division, C.R. Bard, Inc. 8195 Industrial Boulevard Covington, GA 30014

Phone: 770-784-6722 Facsimile: 770-784-6419

Contact Person: Michelle R. Gudith, Director, Regulatory Affairs

Date Prepared: March 30, 2007

### Name of Device and Name/Address of Sponsor

Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube

Bard Medical Division, C.R. Bard, Inc. 8195 Industrial Boulevard Covington, GA 30014

NOV 0 6 2007

#### Common or Usual Name

Endotracheal tube

#### **Classification Name**

Tube, Tracheal (W/WO Connector)

#### **Predicate Devices**

Mallinckrodt Hi-Lo® / Intermediate Hi-Lo Cuffed Tracheal Tubes

#### Intended Use / Indications for Use

Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube is indicated for airway management by oral or nasal intubation of the trachea for anesthesia and in cases where duration of intubation is expected to be 24 hours or longer, or may be unpredictable.

Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube has been shown to reduce the incidence of microbiologically confirmed Ventilator Associated Pneumonia (VAP) in patients intubated for 24 hours or longer from an incidence of 7.5% in patients intubated with uncoated ET tubes to an incidence of 4.8% in patients intubated with the Bard Silver-Coated ET tubes (reduction of 36%) and to delay the time to onset of microbiologically confirmed VAP.

For Adults Only

#### **Technological Characteristics**

Agento™I.C.® silver-coated endotracheal tube is a sterile bifurcated (two-lumen) polyvinyl chloride tube with a polyvinyl chloride cuff. The tube design incorporates a Magill curve and features a radiopaque line to assist radiographic visualization. An indicator (ORAL: NASAL) is provided on standard length tubes to mark the tracheal tube length in centimeters. This indicator and all other device features listed above were tested in accordance with the American Society for Testing and Materials ("ASTM") designation F 1242-96, Standard Specification for Cuffed and Uncuffed Tracheal Tubes. The Bard Silver-coated Endotracheal Tube is available with a hooded Murphy tip, a high volume, low pressure cuff and self-sealing valve with attached pilot balloon. The Bard Silver-coated Endotracheal Tube is available in sizes of 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, and 10.0 mm ID.

Agento™ I.C.® silver-coated endotracheal tube is coated on the outer endotracheal tube surface, including the cuff surface, and on the interior surface of the airway lumen with a proprietary hydrophilic silver coating. Neither the inside of the cuff nor the inside of the inflation lumen is coated.

#### **Performance Data**

In vitro microbial assays, functional performance testing, biocompatibility testing, and animal studies have demonstrated the safety and effectiveness of the Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube. Clinical studies of the Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube demonstrated a reduction in the incidence and time to onset of VAP compared to the predicate uncoated endotracheal tube.

#### Substantial Equivalence

Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube is as safe and effective as the Mallinckrodt Hi-Lo® / Intermediate Hi-Lo Cuffed Tracheal Tubes. The Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube has the same intended uses and similar indications, technological characteristics, and principles of operation as its predicate device. The technological differences between the Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube and its predicate device raise no new issues of safety or effectiveness. In vitro, bench, animal and clinical data demonstrate that the Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube is as safe and effective as the Mallinckrodt Hi-Lo® / Intermediate Hi-Lo Cuffed Tracheal Tubes. Thus, the Agento<sup>TM</sup> I.C.® silver-coated endotracheal tube is substantially equivalent.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

NOV 0 6 2007

Ms. Michelle R. Gudith Director of Regulatory Affairs C.R. Bard, Incorporated Bard Medical Division 8195 Industrial Boulevard Covington, Georgia 30014

Re: K071365

Trade/Device Name: Agento I.C. Silver-Coated Endotracheal Tube

Regulation Number: 21 CFR 868.5730

Regulation Name: Tracheal Tube

Regulatory Class: II Product Code: BTR

Dated: September 28, 2007 Received: October 1, 2007

#### Dear Ms. Gudith:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal</u> Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

# **Indications for Use Statement**

510(k) Number (if known): <i>K 07/365</i>			
Device Name: Agento™ I.C.® Silver-coated Endotracheal Tube			
Indications for Use:			
The Agento™ I.C.® silver-coated endotracheal tube is indicated for airway management by oral or nasal intubation of the trachea for anesthesia and in cases where duration of intubation is expected to be 24 hours or longer, or may be unpredictable.			
The Agento <sup>TM</sup> I.C.® silver-coated endotracheal tube has been shown to reduce the incidence of microbiologically confirmed Ventilator Associated Pneumonia (VAP) in patients intubated for 24 hours or longer from an incidence of 7.5% in patients intubated with uncoated ET tubes to an incidence of 4.8% in patients intubated with the Bard Silver-Coated ET tubes (reduction of 36%) and to delay the time to onset of microbiologically confirmed VAP.			
For Adults Only			
Prescription Use <u>X</u> Use (Part 21 C.F.R. 801 Subpart D) Subpart C)	AND/OI		ver-The-Counter 1 C.F.R. 807
(PLEASE DO NOT WRITE BELOW THIS LINE CONTINUE ON ANOTHER PAGE IF NEEDED)			
Concurrence of CDRH, Office of Device Evaluation (ODE)			
(Division Sign-Off) Division of Anesthesiology, General Infection Control, Dental Devices	•		Page <u>1</u> of <u>1</u>
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